

**REMARKS**

Claims 1-24, 26, 27 and 29 are pending in the present Application. Claims 1, 13, 20, 22, 24, 26 and 29 are written in independent form. By this Amendment, claims 25, 28 and 30 are cancelled without prejudice or disclaimer. Claims 1, 13, 20, 22, 24, 26 and 29 are amended. No new matter is added.

**I. Objection to the Drawings:**

The drawings are objected to for failing to show reference number “26” described in the specification. As the specification is amended to correct a typographical error changing reference number “26” to “526”, withdrawal of the objection is respectfully requested.

**II. Claim Objections:**

Claim 20 and 28 are objected to for various informalities, such as typographical errors. As claim 28 is cancelled, the objection to that claim is moot. Claim 20 is amended to correct the informalities. Therefore, withdrawal of the objection is respectfully requested.

**III. Rejection under 35 USC §112:**

Claims 22 and 23 are rejected under 35 USC §112, second paragraph, for allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter Applicant regards as the invention. Specifically, the recitation of “said user” in claims 22 and 23 is alleged to be indefinite due to a lack of antecedence.

As the claims are amended to provide antecedence, withdrawal of the rejection is respectfully requested.

**IV. Rejection under 35 USC §103:**

Claims 1-30 are rejected under 35 USC §103(a) as being unpatentable over US Patent Application Publication 2002/0168618 to Anderson, et al. (Anderson) in view of US Patent 6,929,481 to Alexander. As claims 25, 28 and 30 are cancelled, the rejection of those claims is moot. The rejection of the remaining pending claims is respectfully traversed.

Anderson relates to assisting physicians in their training and in preplanning of diagnostic and therapeutic procedures performed in the vascular cardiovascular catheterization laboratory. In

addition to providing realistic visual feedback and interacting with essential devices, such as are found in a cardiovascular catheterization laboratory, the simulator also provides active haptic force and tactile feedback components to enhance the total hand-eye coordinated experiences encountered by physicians during actual interventional procedures. A system for simulating the movement of a medical device in a body cavity or lumen of a patient includes a medical device comprising a first end for manipulation by a user and a portion comprising a second end insertable into a simulated body cavity or body lumen in a manikin.

It is alleged in the Office Action that Anderson discloses “nested instruments” at paragraph [0018]. However, paragraph [0018] recites,

More than one medical device can be inserted into the interface and the position of each medical device can be independently monitored. Suitable medical devices for use with the system include, but are not limited to: a catheter, guidewire, endoscope, laparoscope, bronchoscope, stent, coil, balloon, a balloon-inflating device, a surgical tool, a vascular occlusion device, optical probe, a drug delivery device, and combinations thereof.

Thus, the cited section of Anderson is silent regarding the nesting of real instruments, as well as being silent regarding a control portion that calculates the effect of the nested instruments on one another. Rather, Anderson merely mentions that a number of tools may be interfaced but does not mention nested tools.

Moreover, Alexander fails to overcome the deficiencies of Anderson in that Alexander merely discloses an interface device and method for interfacing instruments to a medical procedure simulation system server to interface peripherals in the form of mock medical instruments to the medical procedure simulation system computer to enable simulation of medical procedures. The interface device includes a housing having a mock bodily region of interest to facilitate insertion of a mock instrument, such as an endoscope tube, into the interface device. The mock bodily region of interest may be pivotable to simulate various patient orientations. The instrument is engaged by a capture mechanism in order to measure rotational and translational motion of the instrument.

Thus, the combination of references fails to disclose or suggest calculating an effect of a first instrument inserted into a second instrument in a nested manner, each instrument having properties, being at least one of a natural shape, stiffness, length, diameter and radioopacity, said

instruction set being configured to calculate movements of said first instrument propagated to the second instrument, as recited in the amended claims.

As the combination of references fails to disclose or suggest each and every feature recited in the rejected claims as amended, withdrawal of the rejection is respectfully requested.

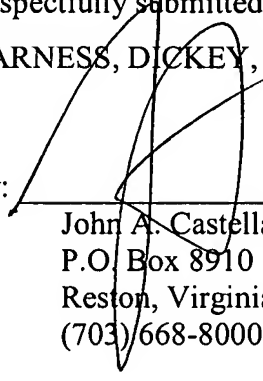
**CONCLUSION**

In view of the above, Applicant earnestly solicits reconsideration and allowance of all of the pending claims.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,  
HARNES, DICKEY, & PIERCE, P.L.C.

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